

**Commonwealth of Kentucky  
Environmental and Public Protection Cabinet  
Department for Environmental Protection  
Division for Air Quality  
803 Schenkel Lane  
Frankfort, Kentucky 40601  
(502) 573-3382**

**AIR QUALITY PERMIT  
Issued under 401 KAR 52:040**

**Permittee Name:** ITW Ramset  
**Mailing Address:** 7000 Martin Luther King Jr. Blvd, Paris, KY  
40361

**Source Name:** ITW Ramset  
**Mailing Address:** 7000 Martin Luther King Jr. Blvd  
Paris, KY 40361

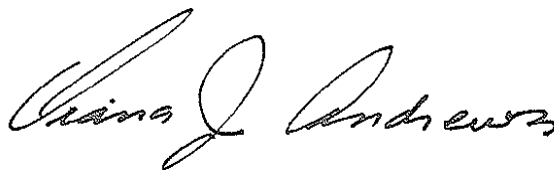
**Source Location:** On Paris Bypass Rd near Legion Rd.

**Permit ID:** S-08-062  
**Agency Interest #:** 301  
**Activity ID:** APE20080001  
**Review Type:** Minor Source, Operating  
**Source ID:** 21-017-00024

**Regional Office:** Frankfort Regional Office  
663 Teton Trail  
Frankfort, KY 40601  
(502) 564-3358

**County:** Bourbon

**Application**  
**Complete Date:** July 3, 2008  
**Issuance Date:** July 10, 2008  
**Revision Date:**  
**Expiration Date:** July 10, 2018



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**John S. Lyons, Director  
Division for Air Quality**

## **SECTION A - PERMIT AUTHORIZATION**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:040, State-origin permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining other permits, licenses, or approvals that may be required by the Cabinet or other federal, state, or local agencies.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS****Emission Unit 01 (HT-1) Heat Treat Furnace**

**Description:** A 3-zone natural gas fired furnace for the heat treating of nails. The Zone 1 burner is rated at 2.613 MMBTU/hour. The Zone 1 burner vents through stack EP-01. The total capacity of all other burners associated with the furnace (the burners for Zones 2 and 3, along with the flame curtain preheat and eductor burnoff), total 0.30 MMBTU/hour. All of the aforementioned burners vent through stack EP-02. The maximum quantity of raw materials input to the furnace is 1.5 tons of metal per hour.

Date constructed: January 1998

**APPLICABLE REGULATIONS:**

**401 KAR 59:010 – New process operations.** Applicable with respect to particulate emissions to each affected facility commenced on or after July 2, 1975.

**1. Operating Limitations:**

The usage rate of raw materials used in all affected facilities shall be limited so that the emission limitations set forth in item 2, below, are not exceeded.

**2. Emission Limitations:**

- A. 401 KAR 59:010 § 3(1) Opacity Standard: The opacity of continuous emissions from a control device or stack shall be less than twenty (20) percent opacity.
- B. 401 KAR 59:010 § 3(2) Mass Standard: Particulate matter emissions from a control device or stack shall not exceed 2.31 pounds per hour.

**Compliance Demonstration Method for Emission Limitation A:**

Compliance with the opacity standard shall be determined by the permittee performing a qualitative visual observation of the opacity of emissions at each stack no less than weekly and maintaining a log of the observations. If visible emissions from the stacks are seen (not including condensed water in the plume), then an inspection of process equipment shall be initiated and corrective action taken. If visible emissions are present after the corrective action, the process shall be shut down and shall not operate again until repairs have been made that result in no visible emissions from the process during operation. In lieu of shutting the process down, the permittee may determine the opacity using Reference Method 9. If the opacity limit is not exceeded, the process may continue to operate.

**Compliance Demonstration Method for Emission Limitation B:**

Compliance with the mass standard will be assumed unless testing is required, when the unit is in compliance with the opacity standard.

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **3. Testing Requirements:**

- A. If the Division requires it, permittee shall perform a Reference Method 5 test, or other methods approved by the Division, to determine the emission rate of particulate matter.  
[401 KAR 59:010, § 4(1) Test Methods and Procedures]
- B. If the Division requires it, the permittee shall perform a Reference Method 9 test to determine the opacity of continuous emissions.  
[401 KAR 59:010, § 4 (5) Test Methods and Procedures]

### **4. Monitoring Requirements:**

- A. The permittee shall monitor the monthly pounds of nails processed.
- B. The permittee shall monitor the monthly natural gas use in million cubic feet.
- C. The permittee shall monitor the opacity of emissions from each stack weekly as described above.

### **5. Recordkeeping Requirements:**

- A. The permittee shall maintain a log of the monthly and annual nails processed in pounds.
- B. The permittee shall maintain a log of the monthly and annual natural gas use in million cubic feet.
- C. The permittee shall maintain a weekly log of visual observations of the opacity of emissions.
- D. The permittee shall maintain records of any corrective actions taken as a result of the presence of visible emissions being detected during an observation.
- E. The permittee shall maintain records of the results of any Method 9 readings performed.

### **6. Reporting Requirements:**

It is specified here that the reporting requirements of Section C (3) (c) of this permit need only include records of the following:

- A. Monthly records of the pounds of nails processed and the million cubic feet of natural gas used. The permittee may report total natural gas use for the entire source and is not required to specify natural gas use for each emission unit.
- B. Records of visible emissions from the stacks during the reporting period, including date and time.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Emission Unit 02 (Q-1)      Quench Bath Tank and Quench Heater**

**Description:** A molten salt quench bath that consists of molten nitrate and nitrite salts, and has a capacity of 3,800 gallons. The maximum process rate is limited by the heat treat furnace capacity and is 1.5 tons per hour. The maximum molten salt input to the process is 6.5 pounds per hour. The molten salt quench bath is heated with two natural gas fired burners, each rated at 0.5 MMBTU/hour.

Date constructed: January 1998

**APPLICABLE REGULATIONS:**

**401 KAR 59:010 – New process operations.** Applicable with respect to particulate emissions to each affected facility commenced on or after July 2, 1975.

**1. Operating Limitations:**

The usage rate of raw materials used in all affected facilities shall be limited so that the emission limitations set forth in item 2, below, are not exceeded.

**2. Emission Limitations:**

- A. 401 KAR 59:010 § 3(1) Opacity Standard: The opacity of continuous emissions from the building containing the molten salt quench bath tank shall be less than twenty (20) percent opacity.
- B. 401 KAR 59:010 § 3(2) Mass Standard: Particulate matter emissions from the quench bath shall not exceed 2.34 pounds per hour.

**Compliance Demonstration Method for Emission Limitation A:**

Compliance with the opacity standard shall be assumed given that the molten salt quench bath vents inside the building.

**Compliance Demonstration Method for Emission Limitation B:**

Compliance with the mass standard shall be assumed given that the molten salt quench bath vents inside the building.

**3. Testing Requirements:**

- A. If the Division requires it, permittee shall perform a Reference Method 5 test, or other methods approved by the Division, to determine the emission rate of particulate matter.  
[401 KAR 59:010, § 4(1) Test Methods and Procedures]
- B. If the Division requires it, the permittee shall perform a Reference Method 9 test to determine the opacity of continuous emissions.  
[401 KAR 59:010, § 4 (5) Test Methods and Procedures]

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **4. Monitoring Requirements:**

- A. The permittee shall monitor the monthly pounds of molten salt input to the process.
- B. The permittee shall monitor the monthly natural gas use in million cubic feet.

### **5. Recordkeeping Requirements:**

- A. The permittee shall maintain a log of the monthly and annual molten salt used in the process.
- B. The permittee shall maintain a log of the monthly and annual natural gas use in million cubic feet.

### **6. Reporting Requirements:**

It is specified here that the reporting requirements of Section C (3) (c) of this permit need only include monthly records of the pounds of molten salt used and the million cubic feet of natural gas used. The permittee may report total natural gas use for the entire source and is not required to specify natural gas use for each emission unit.

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **Emission Unit 03 (BD-1)    Black Dip Tank**

**Description:** Process where nails are dipped in an anti-corrosion coating. The tank holds approximately 41 gallons and is replenished at a rate of approximately 4 gallons per ton of nails processed. The coating is 100 percent VOCs. The maximum make-up rate of coating is 2 gallons per hour.

Date constructed: January 1998

### **APPLICABLE REGULATIONS:**

None

#### **1. Operating Limitations:**

The maximum usage of coating shall not exceed 17,520 gallons per year.

#### **2. Emission Limitations:**

None

#### **3. Testing Requirements:**

None

#### **4. Monitoring Requirements:**

The permittee shall monitor the gallons of coating used monthly.

#### **5. Recordkeeping Requirements:**

- A. The permittee shall maintain records of the gallons of coating used monthly and annually.
- B. The permittee shall make the Material Safety Data Sheet (MSDS) or manufacturers technical data sheet showing the VOC content of coating available to a representative of the Division upon request.

#### **6. Reporting Requirements:**

It is specified here that the reporting requirements of Section C (3) (c) of this permit need only include monthly records of the gallons of coating used.

## SECTION C - GENERAL CONDITIONS

### 1. Administrative Requirements

- a. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:040, Section 3(1)(b) and is grounds for enforcement action including but not limited to the termination, revocation and reissuance, or revision of this permit.
- b. This permit shall remain in effect for a fixed term of ten (10) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division. [401 KAR 52:040, Section 15]
- c. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-11 of the *Cabinet Provisions and Procedures for Issuing State-Origin Permits* incorporated by reference in 401 KAR 52:040 Section 23].
- d. Pursuant to materials incorporated by reference by 401 KAR 52:040, this permit may be revised, revoked, reopened, reissued, or terminated for cause. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance shall not stay any permit condition [Section 1a-4, 5, of the *Cabinet Provisions and Procedures for Issuing State-Origin Permits* incorporated by reference in 401 KAR 52:040 Section 23].
- e. This permit does not convey property rights or exclusive privileges [Section 1a-8 of the *Cabinet Provisions and Procedures for Issuing State-Origin Permits* incorporated by reference in 401 KAR 52:040 Section 23].
- f. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:040 Section 11(3)].

**SECTION C - GENERAL CONDITIONS (CONTINUED)****2. Recordkeeping Requirements**

- a. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of at least five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [401 KAR 52:040 Section 3(1)(f) and Section 1b-IV-2 of the *Cabinet Provisions and Procedures for Issuing State-Origin Permits* incorporated by reference in 401 KAR 52:040 Section 23].
- b. The permittee shall perform compliance certification and recordkeeping sufficient to assure compliance with the terms and conditions of the permit. Documents, including reports, shall be certified by a responsible official pursuant to 401 KAR 52:040, Section 21.

**3. Reporting Requirements**

- a. (1) In accordance with the provisions of 401 KAR 50:055, Section 1, the permittee shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
  - i. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
  - ii. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
- (2) The permittee shall promptly report deviations from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Reporting Requirement condition a.(1) above), the probable cause of the deviation, and corrective or preventive measures taken; to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report [Section 1b-V-3 of the *Cabinet Provisions and Procedures for Issuing State-Origin Permits* incorporated by reference in 401 KAR 52:040 Section 23].
- b. The permittee shall furnish information requested by the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the permit [Section 1a-6 of the *Cabinet Provisions and Procedures for Issuing State-Origin Permits* incorporated by reference in 401 KAR 52:040 Section 23].
- c. Summary reports of monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation. The summary reports

**SECTION C - GENERAL CONDITIONS (CONTINUED)**

are due January 30th and July 30th of each year. All deviations from permit requirements shall be clearly identified in the reports. All reports shall be certified by a responsible official pursuant to 401 KAR 52:040, Section 21.

**4. Inspections**

In accordance with the requirements of 401 KAR 52:040, Section 3(1)(f) the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times. Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency:

- a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation.
- b. To access and copy any records required by the permit.
- c. Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit.
- d. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

**5. Emergencies/Enforcement Provisions**

- a. The permittee shall not use as defense in an enforcement action, the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing State-Origin Permits* incorporated by reference in 401 KAR 52:040 Section 23].
- b. An emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
  - (1) An emergency occurred and the permittee can identify the cause of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
  - (4) The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two working days after the time when emission limitations were exceeded due to the emergency and included a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
- c. Emergency provisions listed in General Condition 5.b are in addition to any emergency or upset provision contained in an applicable requirement [401 KAR 52:040, Section 22(1)].
- d. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [401 KAR 52:040, Section 22(2)].

## **SECTION C - GENERAL CONDITIONS (CONTINUED)**

### **6. Compliance**

- a. Periodic testing or instrumental or non-instrumental monitoring, which may consist of record keeping, shall be performed to the extent necessary to yield reliable data for purposes of demonstration of continuing compliance with the conditions of this permit. For the purpose of demonstration of continuing compliance, a log of the monthly raw material consumption and monthly production rates shall be kept available at the facility. Compliance with the emission limits may be demonstrated by computer program, spread sheets, calculations or performance tests as may be specified by the Division [401 KAR 50:055, Section 2].
- b. Pursuant to 401 KAR 52:040, Section 19, the permittee shall certify compliance with the terms and conditions contained in this permit by January 30th of each year, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an approved alternative) to the Regional Office listed on the front of this permit in accordance with the following requirements:
  - (1) Identification of the term or condition;
  - (2) Compliance status of each term or condition of the permit;
  - (3) Whether compliance was continuous or intermittent;
  - (4) The method used for determining the compliance status for the source, currently and over the reporting period, and
  - (5) For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

**SECTION C - GENERAL CONDITIONS (CONTINUED)**

- (6) The certification shall be postmarked by January 30th of each year. Annual compliance certifications shall be mailed to the following addresses:

Division for Air Quality  
Frankfort Regional Office  
663 Teton Trail  
Frankfort, KY 40601

Division for Air Quality  
Central Files  
803 Schenkel Lane  
Frankfort, KY 40601-1403

- c. Permit Shield - A permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with all:
- (1) Applicable requirements that are included and specifically identified in this permit; or
  - (2) Non-applicable requirements expressly identified in this permit [401 KAR 52:040, Section 11].

**SECTION D - INSIGNIFICANT ACTIVITIES**

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:040, Section 6. Although these activities are designated as insignificant the permittee must comply with the applicable regulation. Process and emission control equipment at each insignificant activity subject to an opacity standard shall be inspected monthly and a qualitative visible emissions evaluation made. Results of the inspection, evaluation, and any corrective action shall be recorded in a log.

<u>Description</u>	<u>Generally Applicable Regulation</u>
1. Space Heaters (total heat input, 2.60 MMBTU/hr; each unit less than 1 MMBTU/hr)	None
2. Zinc Plating	401 KAR 59:010